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| APPLICATION N | 0. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------|--|----------------|-----------------------|-------------------------|------------------|
| 10/686,212 | | 10/15/2003 | Thomas E. Blake III | TRW(FAS)6480 | 5897 |
| 26294 | 7590 | 06/13/2006 | | EXAMINER | |
| | • | HEIM, COVELL & | KRISHNAMURTHY, RAMESH | | |
| | 300 EAST NINTH STREET, SUITE 1700 LEVEVLAND, OH 44114 | | | ART UNIT | PAPER NUMBER |
| | · | | | 3753 | |
| | | | | DATE MAILED: 06/13/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|-------------------------------------|--|--|--|--|
| Office Action Summany | 10/686,212 | BLAKE ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Ramesh Krishnamurthy | 3753 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespond nce addr ss | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)⊠ Responsive to communication(s) filed on 15 M | av 2006. | | | | | |
| | • | | | | | |
| ,_ | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4) \boxtimes Claim(s) $1-5$, $7-20$ and $22-25$ is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) <u>25</u> is/are withdrawn from consideration. | | | | | | |
| 5)⊠ Claim(s) <u>13 - 20 and 22 - 24</u> is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1 - 5 & 7 - 12</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | | |
| 9) ☐ The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| - · · · · · | 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Gee the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail D | ate Patent Application (PTO-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>05/15/06</u> . | 6) Other: | atom representation (1 10 102) | | | | |

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This office action is responsive to amendment filed 05/15/2006.

Claims 1 - 5, 7 - 20 and 22 - 25 are pending.

1. Newly submitted claim 25 is directed to an invention that is independent or

distinct from the invention originally claimed for the following reasons: Newly submitted

claim 25 pertains to a patentably distinct species compared to that recited in the claims

1-5, 7-20 and 22-24. The species corresponding to claim 25 is that disclosed in

Fig. 7 and is patentably distinct from the species readable on claims 1 - 5, 7 - 20 and

22 – 24, since claim 25 calls for a support portion interposed between the peripheral

and central portions of the base.

Since applicant has received an action on the merits for the originally presented

invention, this invention has been constructively elected by original presentation for

prosecution on the merits. Accordingly, claim 25 is withdrawn from consideration as

being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 - 5, 7 and 10 - 12 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Misner (US 2002/0164943) in view of Oppermann et al. (US

2003/0019527).

Misner discloses (Figs. 1 - 6) a pressure relief valve (10) for relieving air

pressure from a passenger compartment of a vehicle, the valve comprising:

A base (20) having a peripheral portion, a central opening (25a, 25b) extending through the peripheral portion; and

A plurality of flaps (42a, 42b) for closing the central opening of the base, each flap having an outer end connected with the peripheral portion of the base and an inner end that is movable relative to the peripheral portion and the other flaps;

Each flap having opposite surfaces against which air pressure acts, differential air pressure acting on opposite surfaces causing the flap to move. A support portion (30) is included in the base that divides the central opening into a plurality of openings (25a, 25b). A hinge (44a, 44b) is provided enabling the movement of the inner end of the flap relative to its outer end. A rim is considered to be inherently molded to the base in Misner. The rim additionally includes a locking portion (16) adapted to secure the valve to a panel of the vehicle, and further being adapted to seal against the panel of the vehicle.

The disclosure of Misner discloses the claimed invention with the exception of explicitly disclosing each flap to move about a hinge wherein the hinge comprises a narrow portion of material formed between the slots in the flap.

Oppermann et al. discloses a pressure relief valve comprising a valve member (70 in Fig. 6 for example) that has a plurality of flaps (72, 74, 76, 78) for the purpose of providing enhanced sensitivity since each flap could deflect with respect to other flaps independently thereby providing quicker relief than possible with an undivided valve member. Furthermore the flaps move about a hinge wherein the hinge comprises a narrow portion of material formed between slots in the flap.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in Misner each flap of the plurality of flaps to move about a hinge wherein the hinge comprises a narrow portion of material formed between the slots in the flap, for the purpose of providing quicker relief than possible with an undivided valve member, as evident from Oppermann et al.

- 4. Claims 13 20 and 22 24 are allowed.
- 5. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

- 6. Applicant's arguments with respect to claims rejected above have been considered but are moot in view of the new ground(s) of rejection.
- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (571) 272 – 4914. The examiner can normally be reached on Monday - Friday from 10:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel, can be reached on (571) 272 – 4929. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273 -

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Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ramesh Krishnamurthy, Ph.D., PE

Jamesh Kroshraunthy)

Primary Examiner

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